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EARLY DAYS



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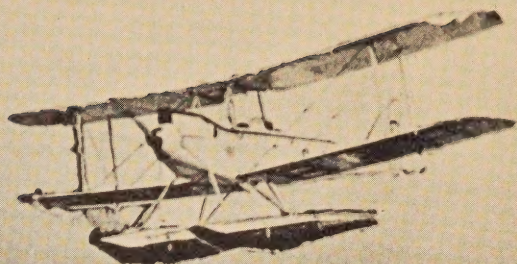
DEPARTMENT OF LANDS AND FORESTS

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ONTARIO

DEPARTMENT OF LANDS AND FORESTS

Hon. A. Kelso Roberts, Q.C.
Minister

F.A. MacDougall,
Deputy Minister



H.A. "Doc" Oaks, mining engineer, pilot and aviation trail blazer.

Front Cover-- Strong men in fragile craft made aviation history over the trackless forests and myriad lakes of northern Ontario.

Left-- Wallace Delahey (in cockpit) with air crew at Whitney Air Base, 1922.

Below-- The slipway at Sault Ste. Marie during the launching of "H" boats, May, 1926.



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EARLY DAYS

A RECORD OF THE EARLY DAYS OF THE
PROVINCIAL AIR SERVICE OF ONTARIO,
OF THE MEN AND THE SHIPS THEY FLEW

By J.C. Dillon

1961

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ONTARIO

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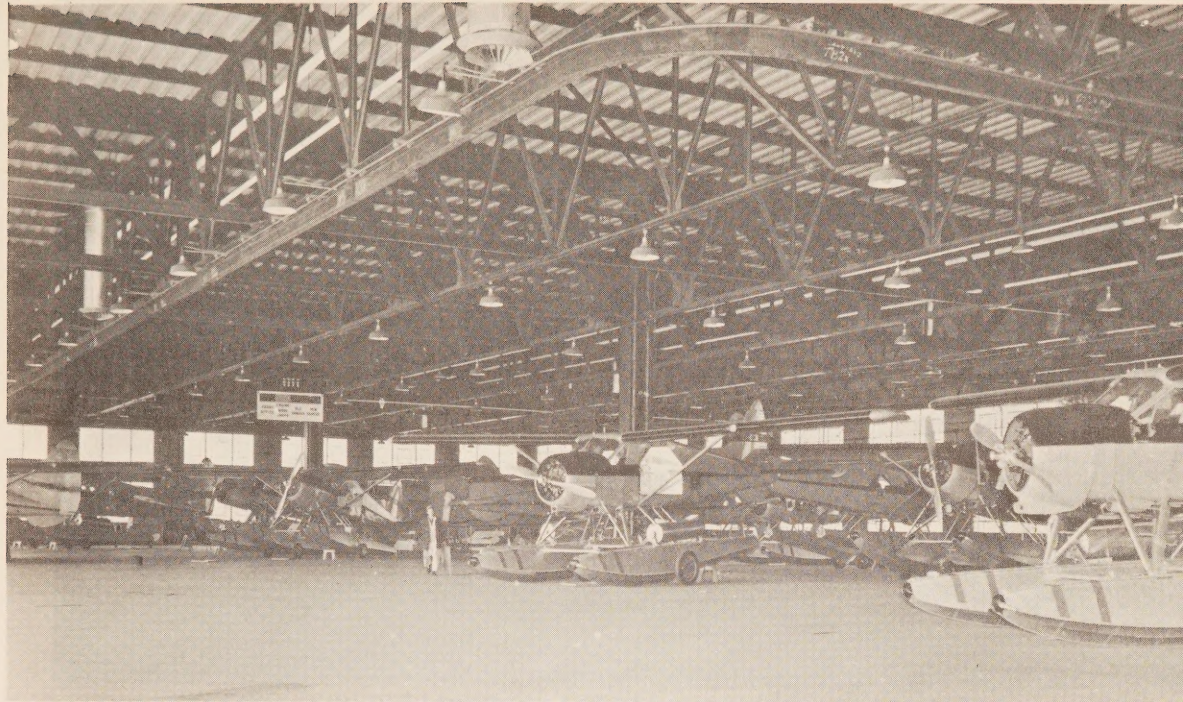


Part of the "H" boat fleet at Sault Ste. Marie early in the winter of 1924 while the hangar was under construction; some of the fleet spent most of the winter outside. Right: a recent view inside the hangar with aircraft in for winter overhaul.

AUTHOR'S FOREWORD

Two difficulties were met in compiling this record. The first was to achieve accuracy in determining dates, the sequence of events and the names of the people who made history in the early days. The second was to avoid moving from one phase of development to another too quickly -- and then have to return to earlier periods -- and yet, it was essential in some cases to follow through from the early beginning to the final development. While this is an air story, it seemed advisable to bring in associated subjects, such as the development of radio communications from ground to air.

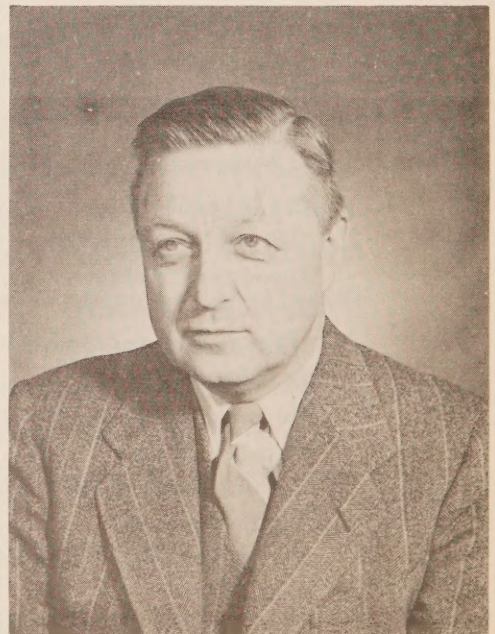
J.C. Dillon, Toronto, 1960.



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A ground survey party takes ten at Biscotasing in 1923. Led by T.E. Mackey who became Chief of Forest Protection Branch in 1946, and thus head of the Air Service since 1957, this was one of the groups who were timber-cruising and mapping topographical features without air support--a noticeable handicap which had a bearing on early air developments. Left to right: Greg Thompson, Jack Walton, Ben Greenwood (later Chief of Parks Branch), A.R. Fenwick, Maurice Cummins, Tom Mackey, Charlie Batt, Pat O'Connor, Stewart MacDonald, Mose Simpson and F.T. Jenkins.



A 1948 study of R.N. Johnston, one of the prime movers of Ontario's Air Service, who has been Chief of Research Branch since 1944. On his left, above, is a group of "H" boats at a beach on Orient Bay, Lake Nipigon.

IN THE BEGINNING

In midsummer of 1919, having survived a tour of World War I combat flying, and with the mission "over there" accomplished, Lieut. R. N. "Reg" Johnston of the RFC-RAF, now Chief of Research Branch in the Ontario Department of Lands and Forests, returned to his home in Toronto with an idea that has borne far-reaching results.

Before enlistment, Reg had been graduated in Forestry by the University of Toronto, and had spent some time with the Department on a ribes eradication survey concerned with white pine blister rust. The combination of a forestry and flying background had convinced him that aerial reconnaissance could result in a worthwhile contribution to the administration of Ontario's forests. There may have been other men with the same idea but Reg set out to do something about it.

E.J. "Ed" Zavitz, who is still involved in forestry matters, was then Provincial Forester. Dr. J.H. White of the University of Toronto was assisting Zavitz in setting up what we now recognize as the District system. This system went into effect in 1922 and, except for some boundary changes, is still functioning. Frank Newman was also attached to Ed's staff, dealing primarily with reforestation projects.

In March, 1921, another air-minded administrator joined the staff to head up the Forest Protection Division, known then as Ontario Forestry Branch. He was Lieut. Charlie Mills who, in addition to being a graduate forester, had just completed a period of service with the RFC-RAF as pilot-instructor. Previous to enlistment, Charlie had spent one season with the Department at the St. Williams reforestation project. He was also responsible for designing the Black Hand fire poster, asking: "Stop! Did you put your campfire out?"

Peace-time flying was a relatively new venture at that period but there was a Federal Air Board in Ottawa with two branches—one civil, the other, military. In 1921, the Civil Branch offered our Department three aircraft under a two-year contract to carry out an aerial timber survey. They were HS2L biplane flying boats of the "pusher" type, powered by a twelve-cylinder Liberty motor. Upon acceptance, this unit was organized in Ottawa by Roland Craig. The pilots were Carter, Boyd and McEwen.

At this time, F.T. Jenkins joined Reg Johnston to form a sketching team. Using the HS2L's, they started out near the Manitoba boundary and carried out aerial sketching eastward to a point north of Lake Nipigon. All work was done north of the north line of the C.N.R. railway. The third "H" boat was kept in readiness as a spare; as the sketching progressed eastward, the spare ship assisted in setting up operating bases. The maps developed by Johnston and Jenkins were the first accurate, geographical and timber records of a large portion of that area.

MILESTONES ARE BUILT

From now on, the pebbles of factual accomplishment were being collected, soon to be mounted as milestone markers in the province's air development. The use of aircraft began to have unexpected and beneficial returns-even more than Johnston had hoped for. For instance, what was to be the forerunner of many aerial forest fire reports was made in August, 1921. This took place in what is now the Sioux Lookout District when Johnston, during a sketching flight, discovered and reported a fire burning on an island in Cliff Lake. There is not much available data on what followed, but it is known that a ranger was flown in to take charge of the fire.

Here, then, we have the origin of aerial forest fire detection and of aerial fire suppression - transportation as well. Ontario had just made aerial history.

This development, alone, made quite an impact on the thinking of those who were concerned with forest fire control. Here was speed, hitherto undreamed of. Other equally worthwhile events were in the making. Action was being speeded up all along the line. Johnston and Nick Carter, of the Federal Air Board (Pilot Carter was concerned principally with aerial development in Ontario), discussed with Ed Zavitz the possibility of establishing our own Provincial Air Service.

Zavitz was not readily sold on the proposal. He wanted (and rightly so) to have something more concrete on which to launch a program with such wide implications. Neither was he convinced that the "H" boat, the type being advanced and apparently the only aircraft available in number, was too well suited to our requirements for bush flying. He was, however, receptive to trying out the idea.

Ed Zavitz was endowed with keen foresight which he applied to forestry matters. That the "H" boat was limited in its performance was indisputably correct. However, the contribution it made to Forest Protection work should in no way be minimized.

The pivotal year was 1922. The District set-up started functioning. Wallace Delahey was established as District Forester at Pembroke, with Peter McEwen in the same capacity at Parry Sound and Gordon Dallyn at Tweed. Those three men were our first District Foresters. The three "H" boats were now assigned to them for general use. Sketching was still being done, but now it was decided that flying should be made available on a District basis for general administration purposes.

One "H" boat was based at Parry Sound and flown by Pilot Tom Lawrence, and the other two at Whitney, which was the main base, with a pilot complement composed of "Black Mike" McEwen, George E. Brookes and Roy "Bill" Grandy. Anyone conversant with RCAF activity will readily recognize and remember that trio.

Two other types of aircraft were tried out and used intermittently, out of Whitney. One was an Avro seaplane with 110 h.p. Clerguet rotary motor, equipped with twin wooden floats; the other, a Curtis J.N., also on floats, powered by a 150 h.p. Hispano-Suiza motor. Grandy and Brookes flew these two types in addition to their regular turn with the "H" boats.

Two men, Jack O'Gorman, a medical student, and Ross Courtenage, a forester, were attached to the complement as aerial observers. Those two helped form the nucleus of the observer group which later became an integral part of the air service.

In the fall of 1922, Ed Zavitz engaged Roy Maxwell of the Laurentide Air Service to fly him over the disastrous Haileybury fire which had burned earlier that year with considerable loss of life. That was Ed's initial flight, made in a Vickers Viking aircraft and requiring about four hours air time.

In 1922, a Curtis-Wright aircraft, hired in Akron, Ohio, and piloted by J. Scott-Williams, was used by C.E. "Westy" Westland for aerial timber sketching. Westy, now Executive Officer in Forest Protection Branch, Toronto, started at Michipicoten and worked through the Missanaibi-Chapleau-Bisotasing area. The maps resulting from this survey proved highly useful in arriving at a timber resource estimate.

Then, too, the James Bay survey was under way, staffed by Reg Johnston, Frank Sharpe, Frank MacDougall (now Deputy Minister of the Department), King Crosbie, Steve Brodie, "Vic" Stewart, Holly Parsons, Harold Burke, Ben Greenwood (later, Chief of Parks Branch), Al Fenwick, Bill Haddow and Harold Heaven. Their main base was at Remi Lake in the Kapuskasing area. Two "H" boats, a Vickers Viking and a Loening Air Yacht, were assigned. The air crew consisted of Pilots Maxwell, Wiltshire and Broatch, and the riggers-fitters were Jack Hyde, Geordie Doan, John Sherbourne, and Pete and Romeo Vachon.

Sketching in connection with the survey was done by F.T. Jenkins and J.D. MacFarlane. It was during this period that Holly Parsons was launched on aerial sketching, a job in which he became proficient and in which he is still engaged. Fly-crews were spotted by aircraft throughout the survey area, Frank MacDougall and Harold Burke heading up that aspect. Aircraft were also used to supply crews on the Abitibi and Mattagami watersheds.

All of the foregoing events and others, funnelled back from the field through E.J. Zavitz to the Minister of Lands and Forests, Hon. Beniah Bowman, had a decided bearing on impending developments. Quite apart from the immediate influence that aerial accomplishments had on current decisions, there is no doubt that each accomplishment helped to establish a line of thinking that would prove invaluable later.

Zavitz was finding some of the facts he was looking for. Aircraft, for instance, were flying canoes from one bush site to another, and this was particularly noted.

Another venture had not gone unnoticed. B.F. "Ben" Avery, now Vice-Chairman of the Board of Directors of the K.V.P. Co. at Espanola but at that time with the Spanish River Pulp and Paper Company, had decided as early as 1920 that aircraft could be used to advantage in making an inventory of their 20,000-square-mile holding. In that year, Ben obtained the services of an Aeromarine flying boat from the Dayton-Wright people in Ohio. He proposed using it for sketching, but it proved unsuitable for that purpose. It was exchanged for a twin-motor job in 1921, with Pilot J. Scott-Williams in charge. That craft was put to work on a square-mile-basis contract which included some aerial photography.

THE LAURENTIDE

During the fall and winter of 1922-23, a three-year contract was signed with the Laurentide Air Service, operating out of Grand Mere' and Lac a la Tortue (Lake of the Turtle) in Quebec. That service was providing a homing base for many war-time pilots who wanted to keep flying. The contract covered fifteen flying boats of the HS2L type. Some of them had been readied for, or actually used on, submarine patrol during the latter part of the war.

The aircraft now began moving toward selected bases, principally to Sudbury. It was there, on a bay of Lake Ramsey in the spring of 1923, that the first assembly point was established. It was also at Sudbury, in the Nickel Range Hotel, that the first radio station was set up to expedite control of the air fleet. Radio was at a tender age then, and many operational difficulties were encountered by Robbie Robinson and his staff.

Pilot Roy Maxwell (now deceased) headed up the Laurentide contingent. Within the contract period, his organizing ability and efficient administration were particularly noticeable, especially to Hon. J.W. Lyons, Minister of Lands and Forests at that time. Mr. Lyons had a keen appreciation of what green forest and wood products meant to Ontario, and he interested himself in the best means of maintaining this heritage.

Part of Maxwell's job as Director was to integrate the air arm and ground staff with the minimum of friction. Pardonable prejudice did exist at that time, largely engendered by ignorance of the contribution aircraft could make to the suppression problem. Maxwell exercised vision and vigour in surmounting the complexities of his job.

There were budgetary scrambles in those days, too. It was found necessary to reduce the Forest Ranger strength from twelve to eight hundred men so that air costs could be met. This reduction did not sit too well with the man on the ground, trying to do a demanding job with inadequate staff.

Even the establishment of operating bases was not accomplished without conflict. J. Scott-Williams, senior pilot with Laurentide, preferred Trout Lake in North Bay District to Lake Ramsey. Wallace Delahey, who had by now transferred from Pembroke to Sudbury as District Forester, wanted the main base at Sudbury. Delahey had the ability to engineer his plans along the lines he considered most desirable for effective results. The eventual decision was left to Roy Grandy, one of Laurentide's top-ranking pilots. He confirmed Sudbury as the most logical and strategic base.

In 1923, the Department also provided a sketching-observer crew to man the "H" boats. This was following along the lines recommended by Johnston, McEwen and Delahey after their 1922 experiences. The men engaged in that work were Gifford Swartman, Jack Judd, Jack O'Gorman, Ned Davidson and Maurice Cummins.

1923 was a bad fire year, particularly in the Sault Ste. Marie-Oba-Sudbury area. C.E. Westland, Forest Assistant to A.B. Connell with headquarters at the Soo, used both "H" boats and Vickers Viking aircraft for sketching the larger fires that season. Roy Grandy did most of this flying.

AND NOW CONTACT

At the expiration of the 1923 flying season, Ontario made the somewhat momentous decision to establish and operate its own air service, and to do so without waiting for the expiration of the three-year contract. Plans were completed during the winter and, as the ice cleared from Lake Ramsey in the Spring of 1924, our air arm was launched under the directorship of Roy Maxwell with the nucleus of Laurentide men and equipment now under the aegis of the Department.

That electric word "CONTACT" now began fanning out across Ontario with Scotch, Irish, English and French accents - all with a distinctively Canadian flavour.

All twenty aircraft, which had been purchased or were in the process of being acquired, proudly wore their wing and hull registration. Each was named after a bird. For instance, CF-AON was known as "nightingale" and CF-AOK as "kestrel". This aided ready identification during message transmission.

It is from now on that errors and omissions in dealing with personnel will be difficult to avoid in this study, even with the assistance I was privileged to call on. Memory is a tricky thing to rely on, but, as little has been written down that one can refer to, memory will of necessity be a requisite. Besides: personnel did not at any time remain static for lengthy periods, so that the "Originals", and those who followed closely in their slip-stream, cannot be too readily distinguished or separated.

THE ORIGINAL PILOTS

One is forced to a certain degree of elasticity in setting forth the "Originals" As time moved in 1924, the flying roster fluctuated.

Some pilots decided to remain with Laurentide, in preference to joining the Department's service. Scott-Williams, Tuddy Tudhope and Roy Grandy were three of these. Then, too, a system of flying proficiency to determine pilot ability, was established, and this resulted in "wash-outs" and replacements. Others were graduated from air engineer to the pilot seat as some had dual qualifications. Romeo Vachon was in that category.

Reasonable certainty surrounds the fact that these were our first pilots: Roy Maxwell, Tommy Thompson, Harry Wiltshire, Rod Ross, Clarke Ruse, Doc Clayton, Fred Stevenson, Carter Guest, G.A. Stevens, Romeo Vachon, Leigh Brintnell, Pat Maloney, Ed Burton, Terry Tully, L.J. Tripp, Harold Foley, Duke Schiller and, later in the season, Doc Oaks, Jack Leach and Hec Ptolmey to be followed closely by Buck Buchanan and R.E. Nicholl. In their own inimitable manner, those men contributed much to the development of Canadian aviation, both in peace and war. So, too, did their immediate successors.

THE ORIGINAL OBSERVERS

In the nose of the "H" boat was a circular cockpit in which a man of normal size was exposed from the chest up. Consistent with visibility conditions, he could scour the country for smoke, or look down into timber, or drop messages with fluctuating accuracy.

Most flying was done between 5,000 and 7,000 feet and, even though the Observer was equipped with a sidcotte suit, helmet, goggles, gauntlets and the essential pickle or milk bottle, it was a cold job. The "H" boat had a gliding angle of about one mile per thousand feet of altitude, and you stayed up high so that you might have some choice of a lake big enough to land in, in case of engine trouble. The water-cooled Liberty motor was not impervious to mechanical ills. If breaks did not occur in flight, you could, as an interesting alternative, have a session with an air-lock in the fuel system. Forced landings were many.

As has been mentioned, McEwen, Delahey and others had learned the value of having an observer on board during a fire detection patrol. They felt he was essential for a number of reasons. First of all, the pilot and engineer sat just ahead of, and below, the motor which was elevated from the hull sufficient for propellor clearance. The control column was a dual-bridge type, and the pilot did not have the same visibility as the occupied, forward compartment.

Secondly, it was becoming increasingly evident, as the scope of flight broadened, that there should be someone in that front cockpit on a fire detection patrol who could see uninterruptedly, who knew how to plot a fire accurately, who was able to estimate control measures, and who knew the location of ground headquarters and the information needed.

The information expected from an observer was the size of the fire in acres; the best and quickest way into it; availability of water for pump use, and how far it was from the fire; the type of timber burning; the fire's direction and probable rate of spread; the most probable cause; and the number of men required to effect control.

The observer also acted as navigator, in a sense, by keeping the ship directionally on flight course. This was important as patrol courses were plotted to cover the most hazardous areas or where other detection media did not exist.

The need for observers had also been established with Messrs. Zavitz and Mills, and Reg Johnston was given the job of setting up that branch of the service. Johnston's code was that observers were to carry out their job in such a manner that there could be no criticism from the ground staff. He selected Ned Davison, Giff Swartman and George Phillips to head up the detachment. Swartman, along with "Dusey" Kearns, used Sudbury as the Eastern Observer Base, and Ned Davison and George Phillips took over the Western group.

Together, they combined in developing a training plan which required each potential observer to be given both aerial and ground instruction and a final

examination. The ground portion meant complete familiarization with the organization and needs of the ground staff. The aerial part was intended to develop map reading and fire analyzation, plus message-dropping technique. Before turning the western group over to Phillips, Davison designed the flight record reports that observers used throughout their period of service.

The original Observers under Swartman and Phillips were Dusey Kearns, George Delahey, Ernie Wilson, Archie McEwen, Doug Murray, Vic Gilbert, Jack O'Gorman, John Cockin, Carl Vokes, Jack Judd, Leonard Braden, Don Solandt, Don Marritt and Monty Baker. Then, in 1925 and subsequent seasons, Frank Garnham, Doc Reid, Jack Allely, Al Fisher, Sandy Sanderson, Drew Jeffries, T.T. Pineo, Larry McCausland, Alf Grasser, Jack Dillon, Gordon King, Red Cross, Harvey Canning, Harold Coates, H.E. Capp, Pat Patterson, Ian Gordon, Ken McNeill, Sam Cowan and Leo Ouellette joined the ranks.

Aerial photography was now being seriously considered as an aid in administration, and some observers moved into that field. Giff Swartman was the Instructor, with his Fairchild camera mounted on the nose of the 'H' boat where the original bomb site mount used to be. He photographed obliquely. The photographs that were taken during the flying season were plotted during the winter under R.N. Johnston's guidance. J.M. "Joe" Bishop was the key man in the plotting division. Maurice Cummins and Holly Parsons were, by now, well launched on sketching work. Some observers became pilots, and some joined the ground suppression staff.

In 1927, sixteen deHavilland Moths were purchased and, with their entry into the flight plan, the observer requirement waned to some slight extent. The Moths were tandem-seated, and no air engineer was carried on flight. The pilot had uninterrupted visibility, except dead ahead.

RIGGERS AND FITTERS

To keep the fleet airborne, and do it from bush bases, required mechanical geniuses at the helm. It should be noted that the names "Rigger" and "Fitter" were used to distinguish their specialized maintenance work. "H" boats, with their 75-foot wingspan and network of spars, struts, and flying and landing wires, took "some rigging" Sail makers for wing upkeep (doped canvas), and boat builders, for hull repairs, were equally essential. Compass swinging, alone, was a major operation.

As available records and memories go, these men would appear to be the first rigger-fitter group: Jack Hyde, Geordie Doan, John Sherbourne, Jim Phillips, Knobby Clarke, Dick Fraser, Sam Tomlinson, Tommy Siers, Arthur Simard, Bill Hughes, R.L. Briggs, Sam McCauley, Peter Dow, K.A. McBride, Albert and Gordon Hutt, Bill Chapman, Les Failles, Art Denning, Al Cheeseman and George Thompson.

The 1924 flying season was not long under way before Tom Woodside, Pat Reid, Jim Tyrell, Scotty Bain and Eric Billington bolstered the original group. And then, in successive years, came Frank Pooley, Percy Hancocks, George Miles, Nip Greer, Mel Clucas, Stan Knight, Rene Simard, Alex Harvey, Tom Mahon, Bill Lyons, Dunc McPhail, Vern Gillard, Percy Parr, Cliff Noble, Earl Hodgson, George Gill, Morris and Walter McDevitt, Fred Batchelor, Bert Day, Jim Cairns, Walter Christiansen, Bill Campion, Jack Watt, Fred Thomas, Ted Stull, Ernie Wright, Gus O'Reilly, Jack Humble, Dave Fleming, Bill Hill, Rex Ruse, Bill Tweed, Fred Wilmott, Les Beveridge, Harold Foley, Hugh Gibbs, Emery Gee and Lyall Nesbitt. Some of the latter group handled clerical work, too.

Many of those men went on to become pilots. Within their group, they held the germination of future aircraft progress exemplified by the present-day Beaver. They provided many suggestions, based on a wealth of background, which found their way into the design of the Beaver and resulted in a top-notch aircraft for bush flying.

In late 1924, hangar construction started at Sault Ste. Marie, Headquarters for the fleet was established here, and winter overhaul and maintenance was carried out here, as it still is. Sault Ste. Marie was selected because it is a fairly central point for province-wide operations and, because of the current in the St. Mary's River, there is open water at the Soo for a longer period of the year than any other Ontario site could offer.

Special recognition should be made of Roy Maxwell's organizational ability. He established the Soo base in a highly creditable manner and staffed it with the most competent personnel. The safety record of the Service reflects the efficiency of the men who maintain the fleet and the tools with which they work.

WE ACQUIRE AIRCRAFT

To maintain continuity, it may be helpful to list aircraft acquisition from the original "H" boat up to the present time. The advent of new and improved aircraft sometimes influenced the personnel angle, particularly the pilot staff. Acquiring the deHavilland Moths and the 61's, for instance, witnessed the arrival of a group of British pilots. This, then, is the sequence:-

- HS2L's - Biplane flying boat with a 12-cylinder, water-cooled Liberty motor of the "pusher" type, using a four-bladed wooden prop. Top speed, 65-70 knots. Payload, 600-700 lbs. Total of 20 purchased in 1924. Last one retired in 1932.
- LOENINGS - The air yacht, monoplane-boat type. Liberty motor, "pusher" type. Fairly fast for those days. Top speed, 115 mph. Payload, 500 lbs. Two purchased in 1925 and both written off in Lake Ramsey in 1926.
- D.H. MOTHS - These were our first seaplane type, powered in sequence by a Cirrus Mark I, Mark II and a Gypsy motor, air cooled. The Moth was a biplane and the wings could be folded. It was originally designed for wheels but was converted to Short and McDonald floats. Payload, 250 lbs. Sixteen were purchased in 1927 and then others followed. They remained in service until 1942.
- DH 61's - Our first freighter of the biplane-seaplane type. Two obtained in 1928, originally powered by a 9-cylinder Bristol Jupiter and changed over later to a Pratt & Whitney Hornet. Payload, approximately 1600 lbs. Had good take-off, and wings could be folded. Used to some extent for aerial insect spraying. Remained in service until 1940.
- VICKERS
VEDETTE - Biplane-boat type, purchased primarily for aerial photography in 1929. Remained in service until 1944. These were our first amphibious-type craft.
- HAMILTONS - First monoplane seaplane and our first all-metal job. Freighter with a Wasp motor. Payload, 1400 lbs. Four purchased in 1930. All out of service by 1945.
- FAIRCHILD
K-R 34 - Patrol-type seaplane with improved performance over the DH Moth. One purchased and used mostly at Algonquin Park for patrol and administrative purposes, also light freighting. Retired in 1945.
- FAIRCHILD
71's - Freighter, monoplane seaplane with approximately 1200 lbs. payload. This was a good performer. Three purchased in 1930. Served until 1945.

BUHLS	Four built by the Provincial Air Service at Sault Ste. Marie in 1935. Patrol-freighter type. Payload, approximately 800 lbs. Retired in 1948.
STINSONS	- Patrol-freighter type with gull-wing. 800 lb. Payload. Nine used between 1937 and 1948.
WACO	- Light-patrol type, similar to the KR 34. One purchased in 1942 and retired in 1945.
NORSEMANS	- Freighter-type, 1600 to 1800 lbs. Payload. Fifteen purchased between 1944 and 1952. Seaplane type, and a splendid workhorse.
CANSO	- Twin-engine boat type. One purchased in 1945 and sold in 1947. Main purpose: insect spraying.
DH BEAVER	- First of this type purchased in 1948. Now using 37. Mono-plane seaplane type. Department staff had a hand in design suggestions.
DOVE	- Twin-engine executive type, but was also used to some extent for fire-fighting purposes. One purchased in 1952 and sold in 1956.
DH OTTER	- Six of these now in use, and one on order. Three-bladed prop. 600 h.p. Slightly larger than the DH Beaver and with one ton payload.
WIDGEON	- This amphibious job replaced the Dove. Purchased in 1956 and has twin engines. Used for all general purposes and based at Toronto Island airport.

TRAIL BLAZING AND GROWTH

GOLD That magic word echoed full-throated and husky in the Red Lake area of northwestern Ontario in the fall of 1925. Prospectors and miners flocked into the region by canoe and overland pack trail. There was no road. With the approach of the freeze-up, it was evident that there would be a shortage of everything in the mining camps, especially food and clothing, and the province was called on for help. Ours was the only air service readily available and adequately equipped to give assistance and, as it had always done in such emergencies, it provided that help.

This can be recorded as the first of many "mercy" flights handled by our air arm.

Four 'H' boats were posted to Minaki that fall and flown by Rod Ross, Doc Oaks, Romeo Vachon and Carter Guest. Ross was in charge of the flight. They flew provisions, clothing, medical supplies, etc., into Red Lake as fast as they could until ice conditions called a halt. They helped build up a substantial reserve that lasted until the lakes froze over solidly enough for dog-team transport. Sam MacCauley, Tommy Siers and Scotty Bain were the air engineers attached to the flight.

At that time, during the winter months, the pilot staff were free to engage in other activity or remain with the service on overhaul and maintenance work. Doc Oaks, who was also a mining engineer, accompanied by Tommy Thompson and Sandy Sanderson, made a prospecting trip into Red Lake by dog team during the winter.

This led to the launching of Patricia Airways by Oaks. He started the service with a Curtis Lark aircraft which was flown during the following winter from New York to Sioux Lookout by Roy Maxwell, accompanied by Fred Griffin, a reporter for the Toronto Daily Star. As Oaks recalls, it took six weeks for the trip because of inclement weather. Oaks left the Air Service to take over the operation of Patricia, and he took Sam Tomlinson with him as air engineer. Oaks and Tomlinson remained with Patricia until the fall of 1926 when Dale S. Atkinson took over. Atkinson later joined Starret Airways.

In the fall of 1926, J.A. Richardson of the investment firm of the same name, interested himself in commercial aviation. With Oaks and Al Cheeseman and one ski-equipped Fokker, Western Canada Airways was launched. That service eventually drew Rod Ross, Fred Stevenson (the Winnipeg Air field is named after Stevenson) and Leigh Brintnell from the pilot group, and Tommy Siers from the engineers. Ted Stull was to join later. Western Canada Airways, in time, developed into Canadian Airways which, in turn, became Canadian Pacific Air Lines.

In the Spring of 1928, Oaks left Western Canada and, together with Mr. Richardson and Jack Hammell of mining interests, they organized and launched Northern Aerial Mineral Explorations. They established their main base on Abram Lake at Sioux Lookout. Their buildings were later purchased by the Department to serve as a main western base. The N.A.M.E. drew Pat.T.M. Reid from Department ranks. J.P. Culliton learned to fly with N.A.M.E.

WE TRAIN PILOTS

Due to the inroads that commercial aviation developments were making within the provincial staff, it was becoming obvious that we had to do something toward creating a supply of pilots. Doc Oaks recalls that, about the time he was launching N.A.M.E., he had agreed with Maxwell to look elsewhere for air crew and not continue to deplete Department strength.

In the winter of 1927-28, arrangements were made with the R.C.A.F. at Camp Borden to train our men as pilots. Selected to attend the school were George Phillips, Giff Swartman, Bill Lyons, Ed Ahr, Ted Stull, Alex Harvey, Pat Reid and Fred Dawson. Some of those men had considerable flying experience and, for them, the course was in the nature of a "refresher". All the group gained pilot rating and were granted their ticket in the spring of 1928.

In the winter of 1928-29, we started our own flying school at Lake Ramsey, Sudbury. The air base mess was to be the headquarters and D.A. McIntyre, who is now with the D.O.T., was selected as Instructor. Alan Grant and he attempted to open up, and live in, the old Sudbury mess hall, but it was altogether too well ventilated for winter occupation, so Sudbury was discontinued and the school moved to Sioux Lookout.

In that, our first winter season of flying, new pilots were trained. All instruction was given with dual-equipped D.H. Moths on skis. In the spring of 1929 at Sault Ste. Marie, Pilot Tom Cowley of the D.O.T. presented Tom Woodside, George Delahey, Bob Smith, Keith Murray, Doc Reid, Alan Grant and Alf Runciman with their tickets on completion of their check out on floats.

McIntyre was assisted in the instruction that winter by Jack O. Leach (who was then Maxwell's assistant) and by George Phillips. The course was so productive that it was decided to continue it in successive winters. Eric Billington was attached to the school as air engineer. It will be noted that new names are constantly creeping into this account, with new help coming in and older employees moving on.

The 1929-30 winter school produced this group of pilots: A.M. Delamere, Earl Hodgson, Red Trussler, Eric Billington, Hugh McPeherson, Hugh Gibb, Lloyd Mewburn, Jack Judd and Tom Mahon. Ned Davison also had some dual during the school period. C.C. Crossley and Dick Overbury assisted McIntyre in the training that year. Overbury gave a navigational course, as well as dual instruction.

In 1930-31, graduates from the school included Pat Twist, Bob Smith, Pat Howard, Keith Murray, Pete Vosges, Nip Greer, and Eb McKay. Mewburn and Runciman, graduates from the previous season, had a bit more dual, and W.H. "Dusey" Kearns and Ed Hart had some limited time. Many of those pilots eventually went on to jobs in commercial aviation. Bob Smith, for instance,

has served as T.C.A. check pilot for the past 14 years or more, and Keith Murray is flying D.C.7's and Constellations between New York and Miami.

Apace with the school graduates came other pilots who received dual and check outs and licenses. Many such men had a background of war-time flying, apart from that gained from in-service dual on floats. Jeff Hilchie and Mike De Blicquy were two pilots who entered the service in that manner, as did Ed Waller, Jack Caldwell, Scotty Buchanan, Bill Upham, Harold Smith, Reg Nichol, Dale Atkinson, Carl Crossley, Bill Hicks, Ted Cooper, Dick Overbury, Joe Heaven, Jim Westaway and Dick Bibby.

In successive periods came Johnnie Horne, Andy Raney, Chas. Lefevre, Art Burtt, Jack Herrold, Jim Medcalf, Frank Coghill, Frank MacDougall, Jim Taylor, Frank Hughes, Yorki Fiskar, Phil Sauve, W.B. Buckworth, Reg Parsons, Jim Bell, A.B. Smith, Bill Tweed and many others.

In 1934, George E. Ponsford became Director of the Air Service, replacing Roy Maxwell. Ponsford brought considerable war-time and commercial flying experience with him and, like Maxwell, has done much toward the advancement of the Service. He is the vigorous type of administrator who expedites every forward move and improvement.

PROGRESS IN RADIO DEVELOPMENT

As previously mentioned, CFCA radio station was established in the Nickel Range Hotel in Sudbury in 1923. Robbie Robinson was in charge, and considerable experimental work was carried out. Some musical programs were arranged and aired by Giff Swartman and his Nickel Range Band to test the efficiency and coverage of the station. The main objective was to establish air-to-ground contact with aircraft, but little was accomplished until 1924 when Monty Baker joined the Department as observer. At that time, Monty was taking a course in engineering at the University of Toronto where he was graduated in 1925.

Baker and Robinson teamed up in 1924 and built a sending and receiving set. The receiver was established at Sudbury base and the sending portion installed in the "H" boat flown by Tommy Thompson with Baker as observer. The set was code, not voice, and the sending key was attached to a board which was strapped to Baker's knee.

In 1924, Baker discovered a fire in Scotia Township Sudbury District, and, while the aircraft circled the fire, he transmitted the information to Sudbury base. *This was the first time air-to-ground radio was used successfully to report a fire.*

In 1930, Baker and Charlie Ward, who also contributed much to radio development, built an improved set which was installed in the Fairchild KR34 being flown from Algonquin Park base by Frank MacDougall. This too, was code, not voice, and, as MacDougall knew the code, it was useful for ground-to-air transmission.

In between efforts to establish aircraft radio, Baker concerned himself with the use of radio on lookout towers. These tests started in the western part of the province. Most of that experimental work was done in 1926-7. In 1928-29, the tests moved eastward to the Temagami area. In 1934, Baker transferred to Division of Research, and radio development was turned over to J.E. Watson.

Watson and Frederick Noad made an investigating trip to New York and returned with a Lear two-way voice transmitter which was installed in one of the Moths. The installation was heavy and precluded any passenger or freight carrying. Vern Gillard flew the Moth as he had knowledge of radio. Unfortunately, that set received a baptism during a rough water landing in Lake Superior.

C.E. "El" Lloyd, a radio operator in Sioux Lookout District since 1930, was appointed Radio Inspector for that area in 1938 to handle a new venture. The Marconi people and the Department launched a program on a co-operative basis whereby Marconi supplied the equipment and the Department the operating requirements.

During the fall and winter of 1941-42, Lloyd replaced Watson as head of the Department's communication system and, with Don Cooper and Jack Madill assisting him, they moved ahead rapidly. It is a well-established fact that the Department, under Lloyd's guidance, has the best in communication.

ALL OCEAN FLIERS DOWN

Carling Missing with Old Glory; Round-the-World Plane in Jungle

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ATLANTIC VEILS FATE OF CANADIAN FLIERS

Out of the silence of the North Atlantic has come no sign of the fate of Lieut. James U. Medcalf (left) and Capt. Terrence B. Tully, who hopped off from Harbor Grace, ignorant of the distress of Old Glory. Her fuel exhausted, the Carling is believed to have gone down.

LONDON PLANE HOURS OVERDUE

Nothing has been seen or heard of the monoplane Sir John Carling (above), which took off from Newfoundland in an attempted non-stop flight to London, England, Wednesday morning. It is feared she is lost, her fate ever to remain a mystery.

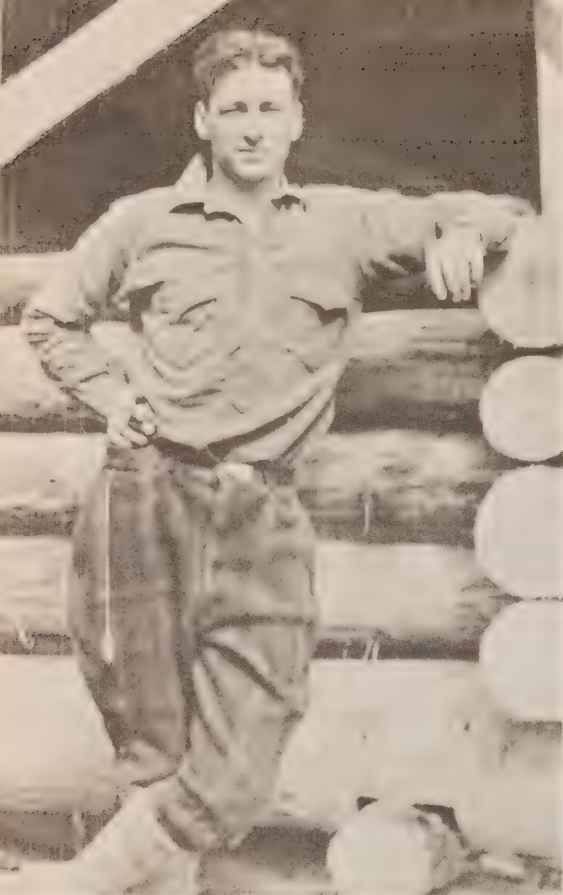
Story on Page 2



APPREHENSIVE OF THEIR FATE

Reverend William Hines, Irtan Zoon, Indra, in the Pride of Detroit early yesterday for either Bangkok, Siam, or Hanoi, Indochina. Long overdue, they are believed to have come down in trackless jungles.

Story on Page 2



Stevenson Field at Winnipeg was named after Pilot F.J. Stevenson, one of the originals, shown in a 1925 pose, left, above. To his right are other early pilots: G.A. "Tommy" Thompson and J.O. Leach in 1925 togs--Jack Leach had a wooden leg from the knee down but you would never guess it from the way he got around; G.A. "Duke" Schiller, 1924; and Tom Woodside (far right) in 1924, original air engineer and now Forest Protection Supervisor at Sault Ste. Marie.

Right: Pilots Ed Ahr (standing in cabin) and Pat Reid with one of the two Loening Air Yachts at Sudbury, 1926.

Left: Pilot Dale Atkinson of PAS and Col. A.G.L. McNaughton (with pipe in mouth) at Orient Bay, 1925.





Sudbury, 1922, left to right: Pilot Terry Tully, Observer Monty Baker, Pilot Alex Harvey and Pilot Pat Reid. To their right, Pilot Eric "Bill" Billington, seated on the float of "The Wren", a deHavilland Moth, on the slipway at Sudbury.



Sudbury, 1926, right: The first seaplane (a Douglas) to be flown across Canada by J. Dalziel McKee and Sqn. Ldr. Godfrey of the RCAF in 1926. Mr. McKee is shown with back to camera, talking to PAS staff: Pilot Harold Smith, Observer H.E. Capp and Engineers J. Watt and Scotty Bain.

Nipigon House, 1925, left: H.A. "Doc" Oaks, Hudson Bay Factor Paddy McGuire and his son, and Air Engineers Sandy Sanderson and L.H. Briggs, seated left to right on the deck of an "H" boat.





Lake Ramsey, 1926. Pilots Roy Maxwell (left) and C.J. "Doc" Clayton ready an HS2L for flight. The passengers are Hon. Wm. Finlayson, Minister of Lands and Forests, 1926-34, and C.R. "Charlie" Mills, Chief of Forest Protection, 1921-46.



Left: Frank A. MacDougall, an early (1922) pilot who became Deputy Minister of Lands and Forests in 1941. This action shot was taken at Oba Lake in 1948.

The first of many mercy flights: an "H" b Red Lake (below) late in the fall of 1925 -- n





Pilots-in-training, air engineers and instructors at a winter-training school in Sioux Lookout. Standing, left to right: Bill Hicks, Bob Smith, Tom Mahon, Earl Hodgson, Jack Leach, D.A. McIntyre, A.M. Delamere, Fred Batchelor, Engineer Thompson and Les Failles. Seated, left to right: Alf Runciman, Pat Twist, C.C. Crossley, Red Trussler and Eric Billington.

Right: District Forester Wallace Delahey (left) with Ross Courtenage, Forester and Observer, on the float of an Avro seaplane at Whitney Air Base, 1922.

from Minaki delivering supplies to isolated miners at snow on trees.





Early Pilots at Sault Ste. Marie, 1925. Back row, left to right: George Delahey (now Provincial Parks Inspector), Carl Crossley, Johnny Horn, George H.R. Phillips, Alan Grant, Keith Murray and Joe Heaven. Front row, left to right: Jack Leach, Roy Maxwell, and Reg Nicholls.

Below: One of the early methods of carrying a canoe. The canoe was split down the centre and one half was attached to each side of an "H" boat. In use, the two halves were clamped together and waterproofed with lampwick.

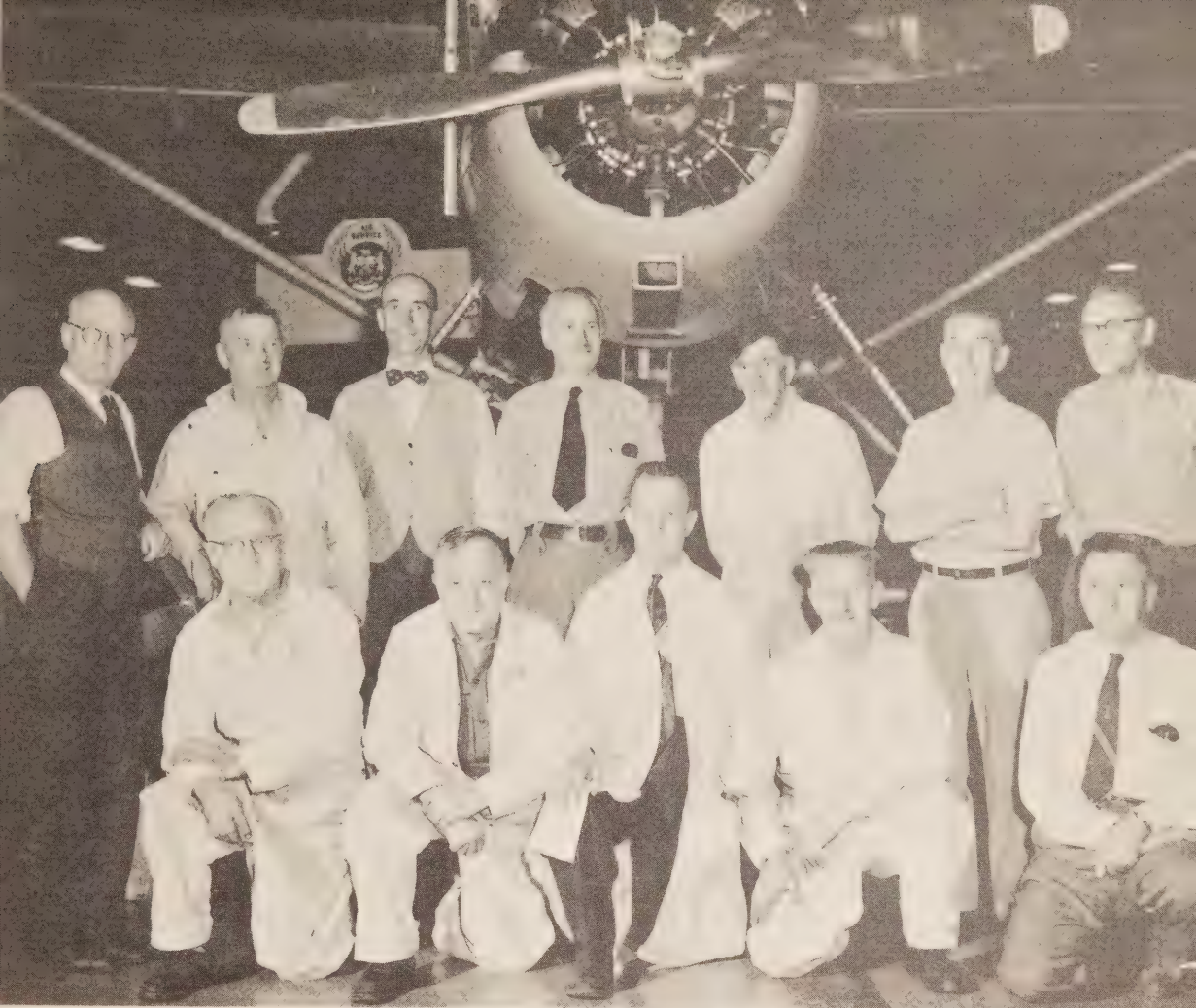




Air Engineer Eric Billington and Pilot Jack Leach pose with "H" boat in 1926. Below them is the remains of the Loening Air Yacht that met disaster in Lake Ramsay on the Toronto-James Bay flight, 1926.







Early riggers, fitters and air engineers, gathered at Sault Ste. Marie in 1955. Standing, left to right: R.H. "Dick" Fraser, A.E. "Art" Denning, H.J. "Jim" Phillips, D.H. "Doug" Murray, George A. Doan, George A. Gill and Sam McAuley. Front row, left to right: L.R. "Les" Failles, W. "Bill" Murray, D.N. "Don" Kraushaar, George E. Miles, and A.L. "Alex" Harvey.

Left: DeHavilland Airport, January 22nd, 1948, just before take off of the first Beaver for the Department. Approving, left to right, are Pilot Yorki Fiskar, Pilot F.J. Dawson (later District Forester at Chapleau and Swastika), Director of Air Service George E. Ponsford, District Forester Peter McEwen, "Punch" Dickens of DeHavilland, and Pilot and District Forester George H.R. Phillips. Below them, Original Observer Giff Swartman, now Indian Agent at Sioux Lookout, stands beside the Service's first aerial camera, mounted on the nose of an "H" boat, 1925.

Right: George E. Ponsford and Pilot J.P. Culliton, part of a friendly group at Big Trout Lake, 1951.





Early pilots at Sault Ste. Marie, 1924, left to right: Hec Ptolemy, Duke Schiller, Terry Tully, Doc Oaks and Reg Nicholls.



J.C. Dillon, early observer, smoke eater and author, at the alert in Sudbury in 1947. Jack became Chief Forest Ranger and was Forest Fire Control Officer at Headquarters in Toronto until his retirement in 1961.

FORCED LANDING

Forced landings were most frequent during the HS2L period, and the cause could generally be attributed to an air lock in the fuel system, a broken connecting rod or damaged propellor blade. Ontario has many lakes, but not all were large enough for an "H" boat. It was easier to get into a restricted area by a steep side slip than it was to get out, and considerable ingenuity was required under such limiting conditions. One case, in particular, may illustrate this problem.

In mid-summer of 1924, Pilot Harry Wiltshire, one of the original pilots, was conducting a gas cache survey. His purpose was to determine the most strategic points at which to locate supplies, and one of the essentials was that the cache must be located on a lake suitable for all-weather operations.

While flying over the northeast corner of Mississauga Forest Reserve, the Liberty motor decided to quit and Wiltshire was forced to land on a small lake. The trouble was a broken connecting rod which necessitated an engine change. Getting the replacement motor was a big undertaking as the lake was well off the beaten trail, and a stone boat and a team of horses, plus considerable man power, were needed to get the 12-cylinder Liberty motor through the bush to the site.

The damaged motor had to be dismantled and the replacement installed. All the ramp requirements had to be fashioned from the surrounding timber. As the nose of the craft was over the water or jutted into it, there was much diving for spanners, nuts and bolts before the job was accomplished. Eventually, the motor was installed and "revved" up and, now, all that remained was to get the aircraft off the lake and into the air.

Every part that could be removed from the ship was taken off. The gas supply was measured out, leaving just sufficient to get to the nearest large lake, Pogamasing, and the water in the radiator was reduced to a bare minimum. The tail of the ship was hauled back onto the shore line with only the extreme nose portion protruding into the water. Then, a 1½-inch rope was attached firmly to the bowsprit, run back through the tail assembly, and tied securely to a huge boulder. While all that was going on, an axe crew were at work on the opposite shore of the lake, felling all the trees in the flight path.

In early morning, when the air would provide the maximum lift, the big moment arrived. Roy Maxwell had decided he would attempt the take-off. The plan was to allow the motor to reach full revolutions and then, on a signal from Maxwell, an axe man would cut the tie rope. They hoped by this means to jump the aircraft off the water and head for the axe-hewn strip on the opposite shore. But, as the motor neared full power, the rope began to part, strand by strand. Giff Swartman was the axe-man, awaiting Maxwell's signal. He

grabbed the rope, hoping to maintain the shore anchor until Maxwell was ready. However, the rope broke and, before Swartman could let go, he was well out in the lake, being dragged behind the ship that Maxwell had throttled back.

A heavier rope was used, and the shore-end tied this time to a 14-inch spruce. When Maxwell gave the signal, Swartman cut the tie rope. After a couple of wild skips across the lake, the craft rose majestically and sailed through the tree path to safety.

Some variation of this take-off procedure occurred more than once in the early days. At no time was a serviceable aircraft, or one that could be made serviceable with bush repairs, allowed to remain in the bush to end its days in an ignominious manner.

THE GRAVEYARD OF THE LOENINGS

Ironically, Lake Ramsey at Sudbury, which helped cradle the Air Service and had proudly borne her brood of "H" boats, had apparently little use for the Loening Air Yachts which followed. Two of those "posh" jobs were acquired in 1925 and considered the flag-ships of the fleet. Roy Maxwell had a special interest in promoting them for executive flying. On occasion, they were used to acquaint people outside the Department with what was being done by bush aircraft. The novelty and romance surrounding flying in those days, emphasized by such movies as "Wings" and "Dawn Patrol", provided timely news topics.

Mrs. Hal Kane Clements, a feature writer, was to be flown to the James Bay - Hudson Bay area to obtain background for a story on the far north and its intervening timber resources, in particular. The flight was to start in Sudbury, and a Loening was buoyed there in readiness. The day previous to take-off, the ship had to be taxied to the slipway for an oil change. Doc Clayton assigned Pilot Harold Smith and Engineer Ed Ahr to the job. Some Sudbury friends of Mrs. Clements, the McLeods, were on the slip, anxious to see the craft, when the decision was made to allow Alex McLeod and his daughter, Myrtle, to come aboard for the taxi trip.

Needing to warm up the oil, Smith, a bit heavy-handed from wrestling the heavier "H" boats through the air, gave the Loening a bit too much throttle; suddenly, they were airborne. Smith had no dual on the Loening and he wanted, urgently, to get it back down on the water. A too-steep turn developed into a stall, and Loening Number One buried itself in Lake Ramsey, a complete write-off. There were no casualties. Ed Ahr did a nice bit of underwater work, prying people loose. Smith had a wrenched back and could barely manage to keep himself afloat.

Loening Number Two also met disaster in Lake Ramsey in the spring of 1926. A dawn-to-dusk flight, from Toronto to James Bay and return, had been planned with attendant publicity. This was to be no mean accomplishment for those days. The Loening, with its air speed of 115 miles per hour, was the fastest boat-type craft of its day and was selected for the job. It carried goodwill messages from the Mayor of Toronto to municipal officials along the flight path. These were to be dropped in special message bags. The first and only message was dropped over Parry Sound.

Upon coming into Lake Ramsey for a re-fuel landing about 0630 Hours, the Loening was permitted to dip a wing a bit too low. Ramsey was dead calm, with light fog patches skidding across it, which was a hazardous combination. Roy Maxwell and C.S. "Jack" Caldwell were piloting the flight. Caldwell was one of our most efficient Moth pilots. He had been attached to the sealing fleet off the east coast as pilot-scout, searching out seal floes. He went on, later, to become test pilot for Vickers and ended his flying career by flying into a high-tension power line.

THE BARNSTORMERS

Every man in the Air Service has his own story about everyone connected at one time or another with the Service. They are the kind of men about whom one can weave a story. This is one of the stories.

Before Maxwell and Doan joined the Service, they had, in company with Harry Wiltshire, formed a barnstorming trio, using a couple of "Jennie's." Doan, in addition to his ability as an air engineer, was a fearless wing-walking, chute-jumping, stunt man. Geordie had a bit of eye trouble that stopped him from piloting, but there was nothing else wrong with him.

At one exhibition, flying over Hamilton, his chute fouled in the landing gear, and he was left hung up and dangling. Maxwell, flying abreast, was taking movies. Everybody watching their aerial antics thought it was all part of the show, as the troupe had done everything else that could then be done with an aircraft in flight. Maxwell's movie of this episode has been shown in many local theatres; it is an early aerobatic thriller.

Well, Harry Wiltshire was having a decidedly sticky time of it, trying to keep control and figuring out how to get rid of Geordie in a nice way. He flew out over Hamilton Bay while Maxwell landed and arranged for a pick-up boat. When all was ready, Wiltshire dropped down and flew Geordie just above water level, opposite the boat. Geordie, sensing what he was supposed to do, cut himself loose. The boat crew fished him out but not before he had swallowed a sizeable gulp of Lake Ontario.

After leaving the Provincial Service in 1934, Maxwell became interested in a commercial flying venture, out of Sioux Lookout and Nakina, that used four Stinsons to fly sturgeon out of Ogoki for the Chicago market. This venture folded, and Roy joined the RCAF, moving up to Squadron Leader of No. 1 Training Command before retirement.

THE McKEE "TRANS-CANADA" TROPHY

In 1931, George H.R. Phillips, Provincial Air Service pilot, won the McKee trophy. At other times, three ex-Provincial pilots, Doc Oaks, Pat Reid and Romeo Vachon, were also recipients, as was Tommy Siers, a former air engineer. Donated in 1926, the trophy was turned over to the Minister of National Defence at Ottawa as trustee on February 11th, 1927, to be awarded annually by the Minister for meritorious service in the advancement of Canadian aviation on either military or civil basis. It cannot be held permanently by anyone. Some of the considerations governing the award are:-

1. The recipient should be domiciled in Canada.
2. Qualifications as a pilot is prior claim to consideration, but the lack of such qualification does not exclude from consideration the claims of others connected with aviation who perform meritorious service.
3. Continuous performance throughout the year should receive greater consideration than a single brilliant exploit.
4. Operations tending to advance the cause of aviation should receive consideration over exploits of a difficult or dangerous character serving no useful end.
5. The extension of the operation of aircraft into new fields should receive special consideration.

The Committee of Award was to consist of the Controller of Civil Aviation and (at the time) the Staff Officer in charge of Civil Government Air Operations of the RCAF.

Mr. J.D. McKee, the donor, was a native of Pittsburgh, Pa. With Squadron Leader Godfrey of the RCAF, he flew a Douglas seaplane across Canada in 1926. This is recorded as the first trans-Canada seaplane flight, and it was recognition of that accomplishment, and the co-operation he received enroute, that prompted the trophy. Much use was made of Departmental air bases across Ontario and at Sudbury, in particular, where a major adjustment was made.

After he had completed the flight, a rather unusual gift reached our Sudbury base from Montreal. It was an extensive shipment of ladies cigarettes-the long, slim, filtered type used in those days by feminine smokers. We could not understand the gift as ours was not a ladies' mess. We later found out from Mr. McKee that he had requested a hotel bell boy to buy and ship a good supply of cigarettes to the mess of the Provincial Air Service at Sudbury. The bell hop confused "Mess" with "Mrs."

Mr. McKee lost his life while landing a Vickers Vedette at his camp on Lac la Peche, Quebec, in June, 1927.

THE GEORGE H.R. PHILLIPS AWARD

The citation reads: "For meritorious service in the advancement of aviation in Canada during the year 1931, in recognition of his work for the Provincial Forestry Branch."

At that time, George was Superintendent of eastern flying operations and based at Sault Ste. Marie. He is now retired. His last assignment with the Department was as Superintendent of Algonquin Park. In presenting the trophy to George, the Minister of National Defence expressed his personal gratification that the long and excellent record of the Provincial Air Service had been fittingly recognized in the awarding of the Trophy to one of its officers.

THE H.A. "DOC" OAKS AWARD

Doc won the award in 1927 while chief pilot and manager of Western Canada Airways, Winnipeg. The citation read: "In recognition of his work in organizing air services to outlying districts."

THE THOMAS MAYNE "PAT" REID AWARD

Pat actually won the award, covering the years 1942 and 1943, when he was the aviation sales manager for Imperial Oil. The citation read: "In recognition of the whole-hearted and energetic support that he had given to everything worthwhile in aviation in Canada, both in peace and war, during the past twenty years."

THE J.P. "ROMEO" VACHON AWARD

Romeo won the award while District Superintendent for Canadian Airways at Montreal. The citation read: "For meritorious service in the advancement of aviation in Canada during 1937 and, particularly, in the operation and development of air services along the north shore of the Gulf of St. Lawrence without accident."

THE THOMAS "TOMMY" SIERS AWARD

Tommy won the award in 1940, and the citation read as follows: "In recognition of his outstanding contribution to military and civil aviation in Canada, and indirectly to British aviation, in the development in Canada of the Worth principle of oil dilution for aircraft engines."

OCEAN FLIGHTS

The London to London attempt.

On Wednesday morning at 8 a.m., September 7th, 1927, a Stinson-Detroiter monoplane, named the Sir John Carling, took off from Harbour Grace, Newfoundland, and headed for Croydon airport, outside London, England. The flight had originated at London, Ontario. At the controls were two Provincial Air Service pilots, Terry Tully and Jim Medcalf. The plane was equipped with a 220 h.p. Wright Whirlwind motor but no radio. They expected to arrive at their destination before Thursday noon. They were not sighted anywhere across the North Atlantic. Having no radio, they were unable to make contact with ships at sea or with Croydon.

Terry Tully had been one of our original pilots and a most competent one. Jim Medcalf had joined our service later, with the advent of the DH Moth craft. While in England, he had taken a short drilling in navigation at Gosport. They were attempting the flight for a \$25,000.00 prize.

Missing at the same time was "Old Glory", Rome-bound, and "The Pride of Detroit", on a round-the-world flight.

The Windsor-to-Windsor contemplated flight.

This flight was to be launched from Windsor, Ontario, and end at Windsor England. Gar Wood was involved, and the pilot was to be C.A. "Duke" Schiller. Due to many considerations, not the least of which was the disappearance of the Sir John Carling, the flight was cancelled.

Schiller was credited in 1928 with the rescue from Greenley Island, Labrador, of the German pilots, Koehl and Baron Gunther Von Huenfield, and the Irishman, Major James Fitzmaurice. They were attempting an east-to-west Atlantic crossing and ran out of gas.

In 1941, Duke organized crews and flew almost continuously for days in search of Dr. Fred Banting, the co-discoverer of insulin, who was killed in an air crash near Goose Bay, Labrador.

Duke lost his life on March 13th, 1943, at Bermuda while on active duty with the R.A.F. Ferry Command.

THE CARL BEN EIELSON SEARCH

In 1929, Pilot Eielson was engaged in flying fur from a frozen-in sealing ship in the Arctic Ocean, 500 miles north-west of Bering Strait. The ship was a Danish-American trader that the Russians had permitted to work the Siberian coast. Eielson flew the catch out to Nome and maintained contact with the immobilized ship. He was flying an all-metal Hamilton.

In the late fall of 1929, Eielson was reported missing, and Fairchild Aviation asked Doc Oaks to organize a rescue-search mission, using three of their 71's for the purpose. At that time, Oaks was managing N.A.M.E., which had many jobs on the go, but, in view of the nature of the mission, he undertook the preliminary organization although he did not fly on the mission, himself.

At that time, there were no gas caches in the Canadian North and, as the aircraft would not be radio equipped, it was decided to start from Seattle, Wash. The three aircraft were shipped to that point and loaded aboard the U.S. Coastguard cutter, the "Chelan", bound for Seward, Alaska. From there, the craft were shipped by rail to Fairbank; at that point, they were assembled, and the expedition launched.

The crew consisted of Pilots Pat Reid, Giff Swartman and Bill Broatch. Broatch had to return from Fairbank, and Swartman had a mishap on take-off, leaving Pat Reid and Ed Young, an American pilot recruited locally, to start the search. The Engineers were Bill Hughes, Sam McCauley of the Provincial Air Service and Kel Mews of N.A.M.E. Swartman was soon assigned another aircraft, a single-motor Wright Douglas, and he headed for Nome. From that base, he covered the area across the Bering Straits and as far North as Wainwright and Barrow. Incidentally, on this search, he made several trips into the mountainous area along the Arctic coast, having on board the men responsible for delivering the first reindeer herd overland to the McKenzie delta for the Canadian Government. They knew the country.

Giff Swartman is now with the Indian Affairs Branch of the Department of Citizenship and Immigration, stationed at Sioux Lookout.

In the meanwhile, Pat Reid also had a mishap. On a forced landing attempt on a creek in the Koyokuk Mountains in Alaska during a snow storm, three feet was torn from one of the Fairchild's wings. He and his engineer, Bill Hughes, whittled out and mounted a splice that got them airborne again. It might have been another wilderness tragedy.

Three months after Eielson was reported missing, his crashed aircraft was located. Apparently, he had flown into the ground during a blizzard.

Eielson was an American of Norwegian extraction. His body was shipped home to North Dakota.

To return to Pat Reid, his name was synonymous with Canadian aviation. Like most of the originals, he had a long association with flying. He lived to read his own obituary twice and he explored many of the far-away places in the Canadian North. Great Bear, the Athabaska, Baker, Coppermine, Fort Churchill and Chesterfield Inlet were some of the points he touched down on, on his 30,000-mile cruise of the Arctic coast. In those days, that entailed considerable flying and good navigation. Pat had won the D.F.M., but he seldom exhibited or admitted that accomplishment.

He and his wife, Margery, were killed in the crash of an airliner over Moose Jaw on April 8th, 1954. His son, John, also became a pilot and was attached to a jet squadron of the R.C.A.F.

THE MOOSE RIVER MINE DISASTER

In mid-April, 1936, a disaster occurred in the Moose River coal mine near Stellarton, Nova Scotia, in which men were trapped underground

Ontario, anticipating the need for help, arranged for two aircraft to be flown from Sault Ste. Marie to Toronto and to stand by at the Island airport. Pilot George Phillips, flying a DH 61 with Air Engineer Ernie Wright, and Joe Heaven, flying a Vickers Vedette with Jim Tyrell as engineer, formed the complement.

Both craft were soon called upon for assistance, and they flew equipment from Toronto to Stellarton, as well as making numerous flights having to do with the rescue attempt between Halifax and the mine. Phillips, with whom I have discussed this venture, tended to play down the contribution they made, but that feeling was not shared by the people in Nova Scotia. Speed was essential in effecting the rescue of the trapped men, and the two aircraft helped to fill that requirement although there was consistently bad flying weather during the entire operation.

Phillips had another experience in 1942, well worth recalling. At that time, he was a flying instructor at Camp Borden. Aircraft were urgently needed overseas, and George was transferred to the Ferry Command. On his first trip across, flying a Hudson Aircraft, his radio went haywire. He landed at Cotonou, Dahomey, in French West Africa on the Gulf of Guinea. That area, unknown to George, was in control of the Vichy French, and George and his crew ended up in a prisoner of war camp where they were held incommunicado for three months and twenty days. Almost everyone, except his wife, Lorna, had lost hope. With a change in the tide of war and the allied success in that area, George and his crew were released. The first letter he wrote to his wife, after being captured, was received by her two weeks after he returned home.

EARLY HAZARDS

To begin with, it was a cold job. The aircraft of the early days were all open-cockpit jobs. Even in the hottest July days, it got quite cool after a couple of hours at a 5,000-, to 7,000-foot altitude. One dressed accordingly but, even so, the chill crept in. It got worse toward fall.

The maps we had were skimpy affairs. Some areas were just blank. This condition gradually remedied itself but, considering that we had no radio and sometimes a compass that wandered off on its own course, flying called for shrewd navigation, especially under poor visibility conditions. It was at such times that pilots literally flew by the seat of their pants. There were such things as a bank and turn indicator, an altimeter and a tachometer, but that was almost the limit of navigational or flying instruments.

Weather was something you took in your stride. Forecasts were the ones you determined by your visual recognition of what the sky held. Sometimes you guessed right, but not always. Line squalls that came up fast were sometimes hard to dodge because you were concerned always with your remaining gas supply and the existence of a nearby, friendly lake, big enough to land in and get out of when the weather cleared.

In August, 1931, Pilot George Delahey, now with Parks Branch in Toronto, was on patrol, flying a DeHavilland Moth. He noted that the weather ahead on his flight path was worsening, and he headed for the safety and shelter of Rainy Lake. He made his landing just as the line squall struck with full intensity. Before he could taxi ashore, the wind enveloped the Moth and flipped it over. The bi-plane Moth on floats was not readily obedient to water navigation at any time, and this stubbornness was intensified with a high wind and correspondingly high waves.

At the same time, on another part of the same lake, another aircraft, this time a HS2L, was trying to make shore shelter. The pilot was Tom Mahon, and the air engineer was "Nip" Greer. The high wind-wave action caused the "H" boat to founder. Mahon and Greer were able to reach shore and eventually got word back to headquarters base regarding their mishap. They were both pretty well water logged, but neither were hurt.

Delahey also managed to extricate himself from his overturned Moth. With his inflated flying vest giving him a degree of buoyancy, he stayed afloat until picked up by some American tourists who witnessed the accident and came to his rescue by boat. This required expert seamanship, due to the water turbulence. Before Delahey could get to an outside communication system to report his whereabouts, a third event was shaping up which turned out to be considerably more serious than the other two.

With Delahey unreported, and in view of the sudden storm which base headquarters knew he must have encountered, a search plane started out the

following day. This was a Hamilton-type aircraft, piloted by Phil Hutton and with Nip Greer on board, as well as Vic Stewart and Alf Runciman as observers. Greer, as has been noted, was with Mahon in the "H" boat when it foundered and, realizing what the storm had done to the sturdy "H" boat, he was keenly anxious to be in on the Delahey search. It is not known what happened during this final episode except that the Hamilton crashed into Rainy Lake. There were no survivors.

"Mayday" is the aircraft distress signal today in Canada and also in some other parts of the world. That single word, which is distinctive and not readily confused with any other spoken word, tells the whole story. The registration and position of the craft follows, and an alert has been created.

Now, the most important part of all this is that many radio stations know a good deal about what is developing at the instant the pilot advises that he is in trouble, and rescue plans are developed immediately.

In the earlier days of flight, you could not tell anyone about your trouble or impending trouble. If you were having a forced landing, you tried to get into some lake that you could walk out from easily and quickly, providing you were able to walk. If no lake was available and you had to land in the bush, you tried to pick an area that held young hardwood growth that would cushion your ground impact.

If you were unable to get out, you attempted to light a smoke signal fire and hoped for the best. You at least knew that someone would be looking for you when you were overdue, and your smoke signal, made by green conifer brush thrown onto a drywood fire, was your radio substitute.

Flying has moved ahead at a phenomenal pace since the peace-time efforts of the 1920's.

WE TRY HELICOPTERS

Being of the opinion that the helicopter was designed to serve a purpose for which fixed-wing aircraft never were intended, we tried them as early as June 26th, 1946 the first time, anywhere in the world, that a helicopter was used in forest fire suppression.

The first use was in the Sudbury District on a fire burning in McLennan Township. The Bell helicopter, used by Jack Dillon, was gratuitously turned over to us for the purpose by Larry Bell, president of Bell Aircraft Corporation, and Ralph Parker, of International Nickel Company, who were using the machine on a magnetometer survey.

From 1946 on, we have used helicopters as the need arose, and when they could be obtained, until 1953 when it was decided to call for tenders on two helicopters for the duration of the fire season. Acquiring helicopters on a "tender" basis is still in effect, but the number has been upped to five. They have also been particularly helpful on wildlife surveys. The RCAF have helped us out during particularly bad fire seasons with their rotary aircraft.

We have used Bell's, Hiller's, Sikorski's and Piasecki's helicopters with gratifying results, and we have accomplished many advancements. The future of helicopters in the Department would seem to be well established.

WE MOVE AHEAD

One of the best ways of terminating this study is to point out where we have arrived in the matter of applying aircraft to the job at hand. To-day, our 37 Beaver and seven Otter are capable of carrying out the following advancements;-

1. By using an aerial-ground hailer developed by the Department, we are able to talk from the air to the ground and issue various directives and fire warnings.
2. By using metal tanks attached to the floats, it is possible to drop water on a fire from the air, and repetitiously.
3. We can drop cargo from an aircraft in flight from either a cabin aperture or from the floats or from both simultaneously.
4. We can take photographs of fires with the polaroid-type camera which provides immediate prints.
5. We can use an aerial estimator to assess accurately the size of a fire or any other area.
6. All craft can carry boats or canoes of limited length and beam.
7. An intercom system, to permit discussions among Otter passengers while in flight, has been applied for.
8. Each aircraft has a radio system, comprised of three transmitters and three receivers, supplying 28 channels to the Beaver and Otter.
9. The helicopters supplied by tender are equipped by the Department with 6-channel vhf radio equipment for use during the term of the contract.

"MAYDAY"

The Provincial Air Service holds a most satisfactory record for safety. Based on hours flown since its inception and conditions under which air time is built, there is ample evidence of efficiency, both in men and equipment. Albeit, there are some sad chapters written into the history of the Service. The following is the record of the eleven fatal crashes from 1924 to the end of the 1959 flying season.

1. In 1924, Pilot Ed Burton, flying an HS2L encountered rough weather in the vicinity of Savanne in Sioux Lookout District. He evidently stalled and crashed. D. McBride, air engineer, and N. Gilbert, observer, were both killed, and Burton suffered a severe leg injury as well as serious burns about the body. He was trapped in the hull of the "H" boat, and the broken gas tank showered him with gasoline.
2. In 1927, Pilot B. Fitchie, flying an HS2L over the easterly limits of Sault Ste. Marie, Michigan, apparently stalled in trying to stretch out a glide approach. Fitchie was killed. The junior pilot he was instructing, Alan Grant, was injured.
3. In 1930, Pilot Jack Leach, while flying a high wing, all-metal Hamilton from Sault Ste. Marie to Port Arthur, started the craft into a series of three loops over Port Arthur harbour. The third loop ended in a stall, and the machine crashed into the bay. Leach was killed. There were no passengers.
4. In 1931, Pilot Earl Hodgson, flying an HS2L, coming into Pays Plat, Geraldton District, for a landing, hit a power line which catapulted the craft into Lake Superior. The air engineer, Lloyd Mewburn, was trapped in the wreckage and drowned. Hodgson escaped serious injury.
5. In 1931, Pilot Hutton, flying a Hamilton over Rainy Lake, apparently stalled. Hutton, Air Engineer Runciman and Observers Nip Greer and Vic Stewart were killed.
6. In 1935, Pilot "Doc" Reid, flying a DH Moth out of Port Arthur with Observer "Red" Cross, encountered a heavy weather front, coming in. Reid apparently wrote a note to Cross, asking if he should return to base or if there were any alternative jobs in the opposite direction that they might do. It is believed Reid attempted to pass the note to Cross and somehow his knee fouled the control stick, causing the craft to pitch. Reid, in any case, was thrown clear of the Moth and killed. Cross spun to his death with the machine. Reid was still clutching the note in his hand when the body was recovered.

7. In 1937, Pilot W.W. Tweed, flying a Stinson SR 9 out of Biscotasing, was injured in a crack-up while landing on rough water. RNAS Pilot Gordon McCuaig and Towerman Miller and his wife were drowned before rescue could be effected.
8. In 1940, Jim Westaway, flying a Buhl, was attempting to reach the hospital at Sault Ste. Marie before dark. He had an injured child and a doctor on board. Head winds forced him to land in near-darkness in the vicinity of Hawk Junction. The Buhl sank and the child died. However, there had been little hope for her recovery, even before the fatal crack-up. Reg Parsons, working then for Austin Airways, flew the child's body home.
9. In 1948, Pilot Jim Westaway, flying a Stinson SR 9 at Severn River, was attempting a take-off from a restricted section of the river with a fair cargo load, and it is believed he stalled while trying to climb the aircraft over obstacles in his flight path. Westaway was killed. There were no passengers.
10. In 1950, Pilot Sid Hutnick crashed while flying a Norseman aircraft at Temagami. Hutnick, Air Engineers Bill Geddes and Jim Tyrell, and Foresters R.P. Phillips and C.D. Perkins were all killed. It is believed that an unsecured portion of the load shifted in flight, causing the craft to become tail heavy and this, coupled with a partial engine failure, caused the aircraft to fall out of control.
11. In 1952, Pilot Oliver Kingdon, flying a DH Beaver at Dryden in Kenora District, crashed after take-off and was killed. This crash was believed due to an error in judgement while circling the base after take-off.

ADDENDUM

The following Provincial Air Service personnel were killed while flying for other agencies.

1. In 1928, Pilot Fred Stevenson, one of our original pilots, lost his life in the crash of a Fokker aircraft while flying for Western Canada Airways at The Pas, Manitoba.
2. In 1927, Pilots Terry Tully and Jim Medcalf were lost somewhere over the North Atlantic while attempting a London, Canada, to London, England, flight in a Stinson Detrouiter aircraft. No trace of the aircraft or occupants has ever been found.
3. In 1929, Pilot Jack C.S. Caldwell was killed while testing a Vickers Vedette at Montréal. He apparently flew into a power line.

4. Pilot Jack Herrold was killed while flying a Lockheed for Trans-Canada Airlines at Calgary.
5. Pilot Harry "Al" McCoy was killed while flying a Stinson SR 9 at Sioux Lookout; wing failure is believed to have caused the crash.
6. Pilot Harold C. Smith was killed while returning to Canada from Prestwick in Ferry Command craft during World War II.
7. Pilot Duke Schiller was killed in a crash in Bermuda while ferrying PBV to England during World War II.
8. Pilot Bill Forster was listed as missing over the Atlantic while in Ferry Command during World War II.
9. Pilot Andy Windsor was killed while serving with the RCAF during World War II.
10. Pilot T.M. Pat Reid was killed in a TCA North Star which collided with a Harvard Trainer aircraft over Moose Jaw in 1954.
11. Pilot Jim Burton was killed in a helicopter crash at The Pas in 1955.
12. Pilot Cal Hull was killed in an RCAF jet crash during World War II or shortly thereafter.
13. Pilot A.G. Sandy Sandison was killed in a helicopter crash while patrolling hydro lines in 1959.
14. Pilot Albert E. Dinnan was killed in a crash at Nakina in 1958.

OBIT

Pilots:- Roy Maxwell, Harold Foley, Nick Carter, Pat Maloney, Doug McDonald, Wilf Hilchie, Bill Hicks, Ed Ahr, Andy Rainey, Hec Ptolmey, Eb McKay, Romeo Vachon, Ted Stull, G.A. Thompson, Frank Barrager, Fred J. Dawson.

Air Engineers,
Observers and

Others:- Vic Godfrey, Emery Gee, George Doan, Arthur Simard, Bill Wilcox, H.J. Crearor, Bob Smith, Leo Doggett, Tom Lake, Percy Hancock, James Terry, C.M. Clucas, James Tyrell, B.W. Clarke, Bill Hill, John Sherbourne, Earl Hodgson, Rene Simard, Cliff Noble, D. Logan, Jack Smith, Alf Dormer, Jim Yoeman, George Gill, George Miles, Harvey Canning.



Aerial crew at Remi Lake, 1925. Standing, left to right: D.H. Murray, H. Rix, Duke Schiller, B. Webster, Frank Pooley, Fred Underwood, and the cook. Kneeling, left to right: Al Cheeseman and Holly Parsons. Below, left: Pilots Al Cheeseman and J.P. Culliton. On their right are Bill Billington and Pilot Pat Maloney at Minaki in 1925.





A popular portrait: Five Beaver, lined up on a beach on Opeongo Lake, Algonquin Provincial Park, during the British Commonwealth Conference, 1952.

Back Cover-- The men are forgotten but the motor belongs to an "H" boat at Whitney Air Base, 1922.



Right-- E.J. Zavitz, caught in a happy moment in 1947. For many years the leading figure in Ontario forestry, Ed presided over the birth of the Air Service.



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